COCHISE COUNTY LEGACY PROJECT– IT

SERVICES

The Information Technology Department provides county government with centralized computer and communications services. Our "customers" are the other county departments, and our services cover the spectrum of information and telecommunications technology. Data processing services include programming, operating and maintaining all county computer systems (mainframe and mid-range). In the area of technical support, we assist in the selection, installation, configuration, and maintenance of microcomputer systems, software, and peripherals. IT also installs, maintains, and operates the communication network to all county offices. The Geographical Information Systems (GIS) division develops and maintains geographically-referenced databases for several departments. As Cochise County's "telephone company" IT installs, maintains, and operates the telephone network in all county offices.

WEB and Programming Services

Creates, designs and prepares layouts for a variety of web-based projects. Develops and maintains intuitive, user-friendly and technically efficient web pages. Updates site content. Troubleshoots website operation, tracks site usage statistics and monitors performance. Prepares elements/images for the web. Locates and debugs website issues; and other related duties as assigned.

Maintains present applications for Treasurer department including Tax bill preparation. Assist in trouble shooting errors with Daily, Monthly and year end processing. Installing new application for Treasures Department that will be more accessible to County Tax payers.
Create reports for Financial application and data base administrator for the sequel servers as needed.
Supports the Elections department and the Recorder's office by extracting data from the State's centralized voter registration system using Crystal Reports.

Telecommunications

Cochise County has our VOIP phone system, Cisco Call Manager. Support sfaxes, video conferencing, voice mail and call handlers. Over 1,000 phones in the county, approximately 100 fax lines. Our building are connected through fiber and microwave. Administers and maintains Cisco VoIP, voicemail systems and voice routers. Installs and maintains analog telephone circuits.

System Administration

Monitors systems resources; analyzes impact of operating system changes; applies operating system changes; defines and configures communications network. Coordinates installation, maintenance, and troubleshooting hardware, loads and configures software updates; oversees back-ups and restores systems; monitors and analyzes system errors; works with service personnel; and customer problem resolution. Analyzes systems faults, troubleshoots and runs diagnostic tests on operating systems and hardware to detect problems. Researches, recommends and deploys IT hardware, software and services.
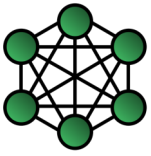
In addition to the services outlined above, the System Administrator assigned to the Sheriff's office also supports and maintains the Spillman Data Base system for the 8 agencies and 5 departments that currently use it. Maintaining the server and the database, coordinating all upgrades and training for all users.

Help Desk

Provides basic first-tier phone and remote access support for hardware, peripherals, network access and office productivity programs.
The Information Technology Technician troubleshoots hardware, software and network operating system. Sets up hardware and loads all required software and latest system updates. Repairs or replaces defective equipment. Assists customers resolve problems with computer hardware and software (backup for help desk or on-call). Provides individual training and support on request. Coordinates with other vendors for computer parts and repairs. Maintains current and accurate inventory of technology hardware, software, and resources. Document service and installation actions by completed forms.

Microwave/Radio

Microwave- System
CCIT provides voice and data network connectivity to all of the regional service centers and outlying office throughout Cochise County. CCIT employs a FCC Licensed Microwave System to create the Cochise County Wide Area Network (WAN). A total of 16 Microwave Links are used to connect all of the regional service centers. The Microwave System is also a crucial component to provide network connectivity to all of the Two-way Radio Communication Sites. Cochise County first utilized its own analog microwave system which provided analog circuits, T1's and T3, in 2002-2003. Currently the county is the final stage of upgrading the analog system with a new Digital IP based Microwave System. The new Microwave system will increase the bandwidth connectivity from site to site from 45Mbps which the old analog microwave system provided to over 250 Mbps.

Two-way radio System:
CCIT currently has a 6 Site 5 Channel VHF Conventional Analog radio system along with a Digital P25 radio channel. The Two-way radio system is not only used by our Sheriff's Department but other public safety agencies in Cochise County. The County is currently in the process of upgrading the two-way radio system and will be installing two new radio systems. A replacement to the Legacy VHF radio system that will be a 8 Site 5 Channel Simulcast System which two of the channels will be upgraded from analog to Digital P25. The county is also upgrading a new 700 Mhz Trunking Radios system that will be similar in capabilities to bigger cities like Phoenix Metro Area. The new radios systems are expected to be operational in early fall of this year.

Computer/Network Classes

In our Learn Lab, computer network classes are offered to county employees as an opportunity to learn more about Microsoft, Windows and Gis applications.

Doris Wells, our computer class instructor retired from Cochise County Information Technology, but comes back to the Learn Lab once a week to teach. She offers several classes on a rotating basis to all county employees who want to learn more about the applications/programs they use in their work. She is also available for one-on-one consultation for special projects
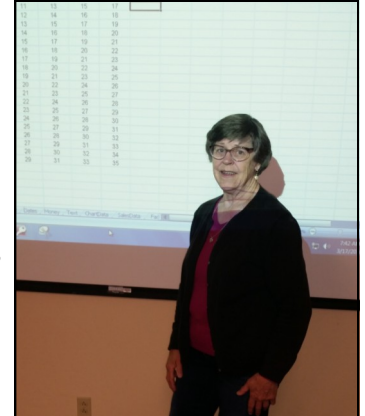
I changed my password to "incorrect" so whenever I forget what it is, the computer will say "your password is incorrect."

Life before the computer

A memory was something that you lost with age
An application was for employment
A program was a TV show
A cursor used profanity
A keyboard was a piano
A web was a spider's home
A virus was the flu
A CD was a bank account
A hard drive was a long road trip
A mouse pad was were a mouse lived
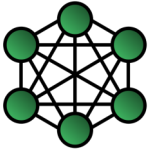
GIS

The Cochise County Geographic Information System (GIS) is a division of the Information Technology Department (ITD) and consists of a core group of individuals dedicated to providing GIS related service and support to all County departments. The GIS staff is responsible for managing and providing end-user support of the Enterprise GIS applications (MapView, GIST and Avec), managing Enterprise GIS data and providing GIS related services and support.

2003 - 2006: NGS/NOAA Height Modernization and Survey/GIS/GPS Control Network Project

2005: Cochise County Enterprise GIS deployed across all County departments via Encompass MapView Implementation

2007: AVEC Implementation and migration to SQL Server
Allowed IT GIS staff and other Enterprise GIS data editors the capability of maintaining enterprise GIS datasets in a multi-editing enterprise environment. This functionality is important for editors that require the capability of editing the same enterprise GIS dataset at the same time and then making that maintenance available in real-time to MapView and Gist users

2009: Scanned Maps, Plats, Subdivisions and Surveys
Over 9,700 recorded maps, plats, subdivisions and surveys scanned and available to all Encompass users via the Sections feature and to Recorder's staff as an electronic option for distribution of the documents.

June 2009: Cochise County GIS Featured in "Surface Matters"
The Arizona Geographic Information Council (AGIC), whose members are appointed by the Governor of Arizona to facilitate and coordinate geospatial activities across the State, featured the Cochise County GIS in the summer 2009 issue of their newsletter called **Surface Matters**.

March 2010: Cochise County GIS featured in "Benchmarks" magazine
Benchmarks "The Official Publication of New Mexico Professional Surveyors", published an article by Michael Daly, LS, PE, about Cochise County's Enterprise GIS titled "Building a Fully Functioning COUNTY GIS in Five Years". Mr. Daly, a Professional Land Surveyor and Engineer from New Mexico, attended a presentation given by Walter Domann, GIS Manager during the previous year's AGIC Education and Training seminar in Tucson.

May 2010: Cochise County GIS featured in "American Surveyor" magazine
Michael Daly's article from "Benchmarks" was picked up and published nationwide in American Surveyor.

March 2011: Parcel Base Complete
July 2012: Cochise County GIS featured on front cover of "Professional Surveyor" magazine
"Two Cochise County staffs—survey and GIS—collaborate in rural Arizona to establish and maintain a mutual vision of success." Article can be viewed here .

April 2012: Walter Domann chosen as Geospatial Professional of the Year at the Arizona Professional Land Survey's yearly conference in Tempe, AZ.

April 2014: "Subdivision Plat and Survey map" goes live to the public via the GIS Map Gallery
Over 9,700 recorded surveys and plats available to the public allowing interested parties to research documents from the convenience of their home or office (or mobile device).

February 2015: Spillman Classic Geobase to Sentryx Geobase Conversion complete Allows more complete and comprehensive location queries and numerous additional map features including aerial imagery to be available to the CCSO and other agencies. This directly impacts the timeliness for emergency responder's to assist 911 callers.

July 2015: Open Geospatial Data Policy adopted

March 2016: Cochise County Parcels Map unveiled to the public
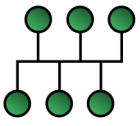
COCHISE COUNTY LEGACY PROJECT– IT

SERVICES

1981 **1981** In December, 1981 a cooperative governmental agreement was approved by resolution for Data Processing Services to be shared with Cochise College. The resolution also approved the lease and license with Sperry Univac for terminals and printers. Also in December, Cochise College formalized a resolution to change pay days to every other Friday because of this agreement to share computer time with Cochise college. The payroll was the first program to be entered into the computer. Later, Accounts Payable and Receivable applications were added. The college used the system during the day, the county's time was at night.

1983 **1983** -A resolution was approved to establish a Cochise County Data Processing Department to provide such as public records maintenance, financial accounts, and otherwise store, maintain and provide County records of significant amounts.
- The Recorder's Office was the first office to fully computerize Voter Registration files.

1985 **1985** The Recorder's Office fully computerized Recording files.

2000 2000 - The Sheriff's Department went to a fully computerized system, Using Spillman Software. This linked Dispatch, Law enforcement, Records and Jail into one integrated system.

2001
- 2001 Enterprise Internet access was enabled and service was provided by c2i2.com, a Sierra Vista company.
- Email was introduced county-wide, using the Microsoft Exchange Server. Certain departments in the county, including the Board office did not have email before the countywide rollout.
- The first County website was unveiled using HTML format.
- The Tombstone Marshall's office joined the Sheriff's Department on the Spillman Database, not only making their agency computerized but also enabling the agencies to share information.

2002
- 2002 -Voice over Internet Protocol phone service was utilized county-wide. It was the first VoIP in Cochise County with Cisco Products
- Trackit, a work request tracking system, was deployed
- In 2001, there were no computerized agenda systems on the market, but the Clerk of the Board, Nadine Parkhurst, and her Chief Deputy, Maria Marsh, saw the time savings that could be possible by computerizing the preparation of the agenda packet. Maria worked with County IT employee, Van Nguyen, to develop a program that would suit the offices agenda preparation. In 2002, the Virtual Agenda Network (VAN in honor of its creator) was rolled out. VAN started to show its age and numerous patches was replaced by Agenda Quick in 2011.

2004
- 2004 Onbase was introduced for document imaging
- Cochise County Sheriff's office received grant money and was able to go Mobile, putting computers in the officer vehicles, enabling them to have to access vital information.

technology rocks.
seriously.
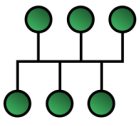
SERVICES - Continued

2007 2007Cochise County Sheriff's Department deployed Puma, this is a system used to store all voice recordings, meeting all security and evidence requirements.

2008 2008 Website was updated using a commercial .NET platform

2010 2010 Exchange upgrade

2011 2011 Agenda Quick replaced Virtual Agenda Network

2013 2013 Cochise County entered the world of social media! Facebook page was created.
The Sheriff's Office upgraded the Puma system to include images.

2014
- 2014 -Website was completely renovated using open source content management.
- New Help desk system was deployed SAmanage
- Server Virtualization
- Radio system upgrade VHF/700 MZ
- Trunking system upgrade

2015
- 2015 Network refresh – upgrade all new switches, routers, wireless access points.
- Upgrade connectivity for Sheriff's Office mobile units from a 32/64 KB system to 4GB.
- Began Pushing information to RAIDS allowing for public access of crime rates in any given area within Sheriff's Department area.

2016 2016 -Microwave upgrade (16 Microwave links for network connecting all Cochise County Service Centers and radio communication sites)